

INPLASY PROTOCOL

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None declared.

The Effect of Contextual Interference on Basketball Training:A Systematic Review

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Review question / Objective: What effect does contextual interference have on basketball technical performance?

Eligibility criteria: (1) It is required to add contextual interference (CI) when basketball specific skills training, and in the control group, the CI should not have been performed; (2) the intervention was CI, and the sample population was comprised of basketball players without gender and age restriction;(3) measurements and outcomes were implemented in a basketball specific context (i.e., shooting, dribbling, and passing) ;(4) randomized controlled trials (RCTs), non-randomized controlled trials (nRCTs), and non-randomized non-controlled trials (nRnCTs) had to be included.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 03 March 2023 and was last updated on 03 March 2023 (registration number INPLASY202330004).

INTRODUCTION

Review question / Objective: What effect does contextual interference have on basketball technical performance?

Condition being studied: Contextual Interference and Basketball Technical Performance. The PRISMA table has been down. And we find 9 articles that meet the

inclusion criteria. Now, we are analysing these articles.

METHODS

Participant or population: Basketball player (both gender)without age and level restrictions.

Intervention: Inclusion criteria: The intervention of contextual interference was

targeted to induce different practice schedule compare with control group. Exclusion criteria: The intervention does not induce different practice schedule successfully.

Comparator: Inclusion criteria: All the control conditions that would not induce contextual interference. Exclusion criteria: The control conditions that have the possibility to induce contextual interference.

Study designs to be included: RCTs, nRCTs, and nRnCTs.

Eligibility criteria: (1) It is required to add contextual interference (CI) when basketball specific skills training, and in the control group, the CI should not have been performed;(2) the intervention was CI, and the sample population was comprised of basketball players without gender and age restriction;(3) measurements and outcomes were implemented in a basketball specific context (i.e., shooting, dribbling, and passing) ;(4) randomized controlled trials (RCTs), non-randomized controlled trials (nRCTs), and non-randomized non-controlled trials (nRnCTs) had to be included.

Information sources: Web of Science, SPORTDiscus, Scopus, and China National Knowledge Infrastructure (CNKI).

Main outcome(s): Reviewing the articles on contextual interference in basketball technical performance and finding the effects of contextual interference on basketball technical skills training. Trying to figure out the best practice schedule to help participants improving training performance.

Quality assessment / Risk of bias analysis: ‘QualSyst’ was used to assess the methodology quality (Kmet & Lee, 2004). It contained 14 items. The score was set according to the degree to which certain criteria were met (yes = 2, partial = 1, no = 0). ‘NA’ was marked when the items did not apply to the study design and excluded from the total calculation of the score. A

score of $\geq 75\%$ indicated strong quality, a score of 55–75% indicated moderate quality, and a score of $\leq 55\%$ indicated weak quality.

Strategy of data synthesis: 1. For synthesis, the measurements and outcomes that encompassed any form of basketball technical performance required, such as shooting, dribbling and passing. 2. After the intervention, whether the contextual interference is induced practice performance should be known. 3. An evaluation of the basketball-specific tests after the contextual interference inducing intervention was required.

Subgroup analysis: Study design: RCTs, nRCTs, and nRnCTs; Intervention: contextual interference; Setting: basketball court; Participant characteristics: male, minor or adult, novice or experienced.

Sensitivity analysis: XThe results (titles and/or abstracts) of studies retrieved using the search strategy and the titles and/or abstracts of studies from other sources will be independently screened by two review authors to identify studies that may meet the above inclusion criteria. The reviewers will review these studies according to the standard of population, intervention, controversy, outcome, and study design. The two review authors will extract data independently, and the differences will be determined and resolved through discussion (discuss with the third author if necessary).

Language restriction: No limitation.

Country(ies) involved: China.

Keywords: Contextual Interference; Practice Schedule; Technical Performance; Basketball.

Contributions of each author:

Author 1 - Xiaopeng Wang - The author drafted the manuscript.

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